

Club-Weight(s)

Field of the Invention

This invention is in the field of exercise, fitness, body strength, and health.

Background of the Invention

In order to fully exercise the body, a person must often obtain a set of exercise equipment, the components of which are designed to exercise each part of the body separately. As a result, one part of the body is often exercised more than the rest, so that a uniform benefit is not achieved.

For example, dumbbells of varying weights are commonly used for exercising the arms and shoulders, but cannot be used effectively for exercising the wrists and fingers. In addition, small dumbbells must be used for exercising weaker muscles, and larger dumbbells must be used for exercising stronger muscles, such as the biceps. Some dumbbells, such as those disclosed in United States Patents Nos. 4,695,051, 4,913,422, and 4,854,575, are filled with a liquid or other heavy substance such as sand, to allow adjustment of the weight of the dumbbell for exercising different muscles. However, modifying the weight of these devices is a cumbersome process.

A number of complex, multi-component exercise devices have been recently advertised, for exercising parts of the body such as the legs, thighs, and chest. These devices typically incorporate sliding or scissored arms, biased by springs, elastic bands, or pneumatic cylinders to providing

1        opposing force against the user. These devices are commonly expensive,  
2        difficult to use, and have the particular disadvantage of exercising at most two  
3        or three parts of the body.

The technical literature regarding exercising has stressed the importance of a "full body" workout. It has been recognized that selectively training certain parts of the body at the expense of others can lead to health problems in those parts of the body that are not exercised. Furthermore, neglect of certain muscle groups can lead to balance problems and an overall loss of athletic performance. In particular, this need for a full body workout has led to the recent trend of "cross-training," i.e., training in several sports simultaneously so as to exercise all parts of the body.

Cross training, however, can be very expensive, for the simple reason that athletic gear and equipment is required for each of the several individual sports or exercises in which the athlete attempts to engage.

**Summary of the Invention**

16 This invention is a novel club for exercising, which may be held  
17 comfortably in one hand. Two of these clubs may be used, one in each hand,  
18 to execute a series of planned movements, which result in a full body  
19 workout. The clubs' weight can be easily adjusted to provide a lighter or  
20 heavier workout, as desired. Virtually any person, regardless of age, size,  
21 weight, sex or level of physical fitness can use these clubs to improve their  
22 strength, health, and fitness.

1 I describe the embodiment of this invention. In this embodiment, the  
2 club has a main body and a handle, and the main body has a hollow core,  
3 which is open at one end. Within the hollow core may be placed one or more  
4 weight tubes, to alter the overall weight of the club. If there are more than one  
5 weight tubes, they are sized so that they may be placed one inside the other,  
6 within the hollow core. An end cap is provided to close the open end of the  
7 club and safely retain the weight tubes within the hollow core. Because the  
8 club carries the weight tubes within the hollow core, its weight can be easily  
9 adjusted without changing the outer shape of the club.

10 The tube-in-tube design is preferred because it prevents the tubes  
11 from rattling against one another within the club. In addition, unused tubes  
12 can be conveniently stacked within each other, requiring little storage space.  
13 In this manner, the user can easily carry and store the tubes in a handbag or  
14 gym bag when they are not in use.

15 I also describe a method for using the clubs, comprising a sequence of  
16 exercise movements, which are to be performed while holding the clubs, one  
17 in each hand. Together with the weighted clubs, these coordinated  
18 movements work the two arms in opposite synchronicity, creating a gyrating  
19 effect on the body, which tends to dislocate the feet from the floor. The body's  
20 natural reaction – to attempt to remain in position – causes nearly all of the  
21 muscles of the body to work in unison to balance the body. The result is a  
22 very good workout, exercising all the muscles of the body. In addition,  
23 because the exercise is aerobic and requires a high degree of endurance,

1       these movements exercise and increase the capacity of the heart and lungs.  
2       Moreover, because the clubs' weight is adjustable, a person using the clubs  
3       can easily control the intensity of the exercise.

4                               Brief Description of the Drawings

5               Figures 1 and 2 are exterior and cross-sectional views of the  
6       embodiment of this invention.

7               Figures 3 and 4 are cross-sectional views of this invention.

8               Referring to figures 1, 2, the club has a handle #11, and a main body.  
9       The main body has a hollow core in which the cylindrical weights are inserted  
10      one inside the other, to increase or decrease the weight of the club. In order  
11      to retain minimum thickness of all the walls of the club, for quick cure after the  
12      injection molding, ribs are designed, fig. 3, #5 as a part of the body and cup.  
13      Ribs and all parts of the club are no more than 2mm. thick. A cover, item #16,  
14      fig. 4, may be fitted over the opening at the top of the hollow core to secure  
15      the inserted cylinders in place. The cover, item #16, fig. 4, may be threaded  
16      onto the main body as shown in Figure 2, or held in place by an interference  
17      fit. The cover #16 may alternatively be attached by such other mechanical or  
18      adhesive means as are known in the art. The cover #16 is preferable shaped  
19      to form the complete club. Fig 2. When in place the cover #16 and main body  
20      appear to form a single unit. Advantageously, the cover #16 may be cupped  
21      or bored on its inside surface so that the cylinders extend partly into the cover  
22      #16 when the cover #16 is in the closed position. In this manner, the cylinders

1        may be made slightly longer, and therefore heavier, giving the club a greater  
2        range of overall weight.

3                In size, the club is approximately 45cm. long, from the tip of the  
4        handle, #11, to the end of the cover #16. The main body is approximately  
5        10cm in diameter at its widest point, and gently slopes as shown in Figures 1  
6        and 2 to a narrower diameter of approximately 5cm. towards the cover #16  
7        and the handle, #11. The diameter of the handle #11, is such that it is easily  
8        gripped by the hand of an average user, and is about 2.5cm. in diameter, and  
9        15 cm long. Of course, the club may be manufactured in a variety of sizes, to  
10       accommodate users ranging from small children to adults. There is also a  
11       loop at the end of the handle to insert a strap in order to secure the club by  
12       the wrist.

13               Tubes may be coated with a soft rubber or similar cushioning layer (not  
14       shown) to promote a snug fit.

15               The end of the handle #11 is preferably, slightly larger in diameter, to  
16       prevent the club from slipping from the hand of the user during exercising. It is  
17       preferably formed integrally with the handle.

18               The club fig, 1, #2 including the handle #12, cover #16, and knob,  
19       should be made of a rigid, durable material, preferable enforced  
20       polypropylene. The exterior of the club may be painted or decorated with  
21       colors or designs to make it attractive and pleasing to the eye.

22               It will be appreciated that cylinders and end cap provide a means for  
23       creating a club of different weights. The adjustable weight of the club may be